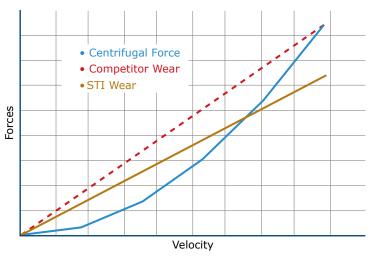
Drilling Tools International offers a product line of multiphase desander equipment for downhole sand and gas mitigation for rod pump applications.

Our multiphase separator is designed to meet the harsh conditions of the downhole environment. Incorporation of our desander will help to reduce sand content in the produced fluids before reaching the pump, resulting in extended pump life. The separation methods are field proven, and each system is designed to meet or exceed applicable standards.

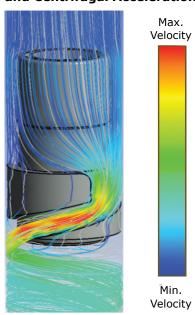
Features

- Primary (Sand) spiral to separate sand and solids
- Secondary (Gas) spiral to assist in gas breakout and separation
- 30' diptube allows sufficient distance for gravity separation of free gas as fluid travels through the desander
- Stainless steel diptube offers high resistance to corrosion, ensuring long operational life of equipment
- Lower bottom sub is offered in two options:
 - Heavy wall is machined from 4140 steel with a 3/4" wall thickness for extended erosion life
 - Light wall is machined from 4140 steel with a 5/16" wall thickness
 - Both subs utilize a machine flat along their axis to ensure the mud anchor is not severed from the bottom of the desander due to erosion at the end of their useful life
- Screen wrapped slotted section is optional
 - Slotted section is typically screen wrapped to prevent large foreign material from entering desander and plugging pump

Centrifugal Force Calculation



Velocity and Centrifugal Acceleration Profile



Strength. Innovation. Performance.

Downhole Desander

DRILLING TOOLSINTERNATIONAL

Downhole Sand and Gas Mitigation Tools

Benefits

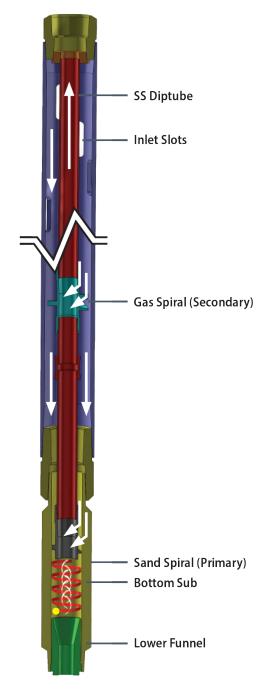
- Standard API connections
- Centrifugal force acts on spiral for particle and gas separation
- Reduce chances of premature pump failure due to erosion/abrasion with 35% thicker wall
- · All steel construction
- Suitable for any Bottom Hole Temperature/Pressure
- Multi configuration bottom sub application per user needs
- Efficient separation of free gas
- Production/Completion Engineering 24/7 Support

Applications

- Downhole pumps (e.g., ESP, Traditional Sucker Rod)
- 15-370 bbl/day

Desander Flow Rate Selection Chart

Rod Pump Flow Rate bbl/day		Desander Part Number
Min	Max	Tubing Size: 27/8" EUE
15	50	DS-PS008
35	75	DS-PS010
55	110	DS-PS020
80	170	DS-PS030
120	250	DS-PS050
185	370	DS-PS070



Drilling Tools International, Inc. is a leading provider of downhole tools to the land and offshore drilling markets. For 40 years our company has been guided by the principals of Strength, Innovation and Performance. Our world-class employees consistently deliver unsurpassed customer service while providing quality products that meet the demanding drilling applications of today's market.

